

WHAT IS CLAIMED IS:

- 1 1. An electronic control unit for a vehicle which is made to carry out a count
2 through the use of a timer in response to a direct power supply from a battery and
3 to fall into a stand-by state and which is placed into an activation when a count
4 value reaches a preset timer activation time or when an ignition key is turned on,
5 said control unit comprising:
 - 6 first oscillation means for supplying a main clock signal at the activation;
 - 7 and
 - 8 second oscillation means for supplying a sub-clock signal to carry out the
9 timer count,
 - 10 with the accuracy of the timer count using said sub-clock signal being
11 calibrated through the use of said main clock signal.
- 1 2. The unit according to claim 1, wherein an oscillation frequency of said
2 second oscillation means is lower than an oscillation frequency of said first
3 oscillation means.
- 1 3. The unit according to claim 1, wherein said first oscillation means
2 comprises an oscillator using mechanical resonance while said second oscillation
3 means comprises an oscillator using electrical resonance.
- 1 4. The unit according to claim 3, wherein said first oscillation means
2 comprises one of a crystal oscillator and a ceramic oscillator while said second
3 oscillation means comprises a CR oscillation circuit.
- 1 5. The unit according to claim 1, further comprising a microcomputer made
2 to operate on the basis of said main clock signal fed from said first oscillation
3 means, with said first and second oscillation means being incorporated into said
4 microcomputer.

1 6. The unit according to claim 1, further comprising:
2 a microcomputer made to operate on the basis of said main clock signal
3 fed from said first oscillation means; and
4 a timer circuit made to operate on the basis of said sub-clock signal fed
5 from said second oscillation means,
6 with a clock waveform outputted from said timer circuit being externally
7 inputted to said microcomputer.

1 7. The unit according to claim 1, wherein a count of said sub-clock signal is
2 made with respect to a given count value of said main clock signal, and the
3 accuracy of the timer count using said sub-clock signal is calibrated on the basis
4 of a sub-clock count result.

1 8. The unit according to claim 7, further comprising storage means in which
2 the sub-clock count result and a sub-clock count value corresponding to said timer
3 activation time are stored in a state where they are associated with each other.

1 9. The unit according to claim 7, wherein a sub-clock count value
2 corresponding to said timer activation time is calculated on the basis of the
3 sub-clock count result.

1 10. The unit according to claim 1, wherein a count of said main clock signal is
2 made with respect to a given count value of said sub-clock signal, and the
3 accuracy of the timer count using said sub-clock signal is calibrated on the basis
4 of a main clock count result.

1 11. The unit according to claim 10, further comprising storage means in which
2 the main clock count result and a sub-clock count value corresponding to said

3 timer activation time are stored in a state where they are associated with each
4 other.

1 12. The unit according to claim 10, wherein a sub-clock count value
2 corresponding to said timer activation time is calculated on the basis of the main
3 clock count result.

1 13. The unit according to claim 1, wherein, whenever the activation is made
2 periodically through the timer count using said sub-clock signal, the accuracy of
3 the timer count using said sub-clock signal is calibrated through the use of said
4 main clock signal.

1 14. A passenger detection apparatus for a vehicle made to detect a load on a
2 vehicle seat through the use of a load sensor for making a decision on a state of a
3 passenger on the basis of a load detection result and to implement a count through
4 a timer upon receipt of direct power supply from a battery and take a stand-by
5 condition and made to be activated when a count value reaches a preset timer
6 activation time for carrying out a zero-point correction on said load sensor, said
7 apparatus comprising:

8 first oscillation means for supplying a main clock signal at the activation;
9 and

10 second oscillation means for supplying a sub-clock signal to implement
11 the timer count,

12 with the accuracy of the timer count using said sub-clock signal being
13 calibrated through the use of said main clock signal.

1 15. The apparatus according to claim 14, wherein an oscillation frequency of
2 said second oscillation means is lower than an oscillation frequency of said first
3 oscillation means.

1 16. The apparatus according to claim 14, wherein said first oscillation means
2 comprises an oscillator using mechanical resonance while said second oscillation
3 means comprises an oscillator using electrical resonance.

1 17. The apparatus according to claim 16, wherein said first oscillation means
2 comprises one of a crystal oscillator and a ceramic oscillator while said second
3 oscillation means comprises a CR oscillation circuit.

1 18. The apparatus according to claim 14, further comprising a microcomputer
2 made to operate on the basis of said main clock signal fed from said first
3 oscillation means, with said first and second oscillation means being incorporated
4 into said microcomputer.

1 19. The apparatus according to claim 14, further comprising:
2 a microcomputer made to operate on the basis of said main clock signal
3 fed from said first oscillation means; and
4 a timer circuit made to operate on the basis of said sub-clock signal fed
5 from said second oscillation means,
6 with a clock waveform outputted from said timer circuit being externally
7 inputted to said microcomputer.

1 20. The apparatus according to claim 14, wherein a count of said sub-clock
2 signal is made with respect to a given count value of said main clock signal, and
3 the accuracy of the timer count using said sub-clock signal is calibrated on the
4 basis of a sub-clock count result.

1 21. The apparatus according to claim 14, further comprising storage means in
2 which the sub-clock count result and a sub-clock count value corresponding to

3 said timer activation time are stored in a state where they are associated with each
4 other.

1 22. The apparatus according to claim 20, wherein a sub-clock count value
2 corresponding to said timer activation time is calculated on the basis of the
3 sub-clock count result.

1 23. The apparatus according to claim 14, wherein a count of said main clock
2 signal is made with respect to a given count value of said sub-clock signal, and the
3 accuracy of the timer count using said sub-clock signal is calibrated on the basis
4 of a main clock count result.

1 24. The apparatus according to claim 23, further comprising storage means in
2 which the main clock count result and a sub-clock count value corresponding to
3 said timer activation time are stored in a state where they are associated with each
4 other.

1 25. The apparatus according to claim 23, wherein a sub-clock count value
2 corresponding to said timer activation time is calculated on the basis of the main
3 clock count result.

1 26. The apparatus according to claim 14, wherein, whenever the activation is
2 made periodically through the timer count using said sub-clock signal, the
3 accuracy of the timer count using said sub-clock signal is calibrated through the
4 use of said main clock signal.